

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APS (ACCESSIBLE PEDESTRIAN SIGNALS)/CPS (COUNTDOWN PEDESTRIAN SIGNALS) AND INSTALLATION OF ADA COMPLIANT SIDEWALK RAMPS AT THE INTERSECTION OF MD 162 (AVIATION BOULEVARD) AND MD 762 (ANDOVER ROAD) IN ANNE ARUNDEL COUNTY, MARYLAND. MD 162 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

M6 762 (ANDOVER ROAD) AND MD 162 (AVIATION BOULEVARD) - EAST LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS ANDOVER AT AVIATION, WAIT." **

WALK: RAPID TICK

MD 162 (AVIATION BOULEVARD) AND MD 762 (ANDOVER ROAD) - NORTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS AVIATION AT ANDOVER, WAIT." **

WALK: RAPID TICK

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS < 10'
** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER WILL BE RETROFITTED TO OPERATE APS EQUIPMENT.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. MIKE HUBER
DISTRICT UTILITY ENGINEER
PHONE: (410) 841-1039

MR. JOE GECKLE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1000

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9571	93 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 6 EACH W11-15 SIGN (36 IN. x 36 IN.)
		- 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSH BUTTON TO CROSS AVIATION BOULEVARD"
		- 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSH BUTTON TO CROSS ANDOVER ROAD"
		- 2 EACH W16-7pR SIGN (24 IN. x 12 IN.)
		- 2 EACH W1-8R SIGN (18 IN. x 24 IN.)
		- 2 EACH W16-9p SIGN (30 IN. x 18 IN.)
		- 2 EACH W16-7pL SIGN (24 IN. x 12 IN.)
		- 1 EACH R9-5 SIGN (12 IN. x 18 IN.)
		- 1 EACH D11-1 SIGN (24 IN. x 18 IN.)
		- 1 EACH R5-1 SIGN (36 IN. x 36 IN.)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

NONE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
2001	3 CY	CLASS 2 EXCAVATION
2002	3 CY	TEST PIT EXCAVATION
5002	60 LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5003	700 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	450 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	120 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	170 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	920 SF	5 INCH CONCRETE SIDEWALK
6003	100 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8002	1 EACH	2-WIRE CENTRAL CONTROL UNIT
8005	1 EACH	ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER
8008	4 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	4 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8018	4 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8043	115 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8044	171 LF	WOOD SIGN SUPPORTS UP TO 4"x6"
8045	93 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	130 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	430 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	700 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

MAINTENANCE OF TRAFFIC

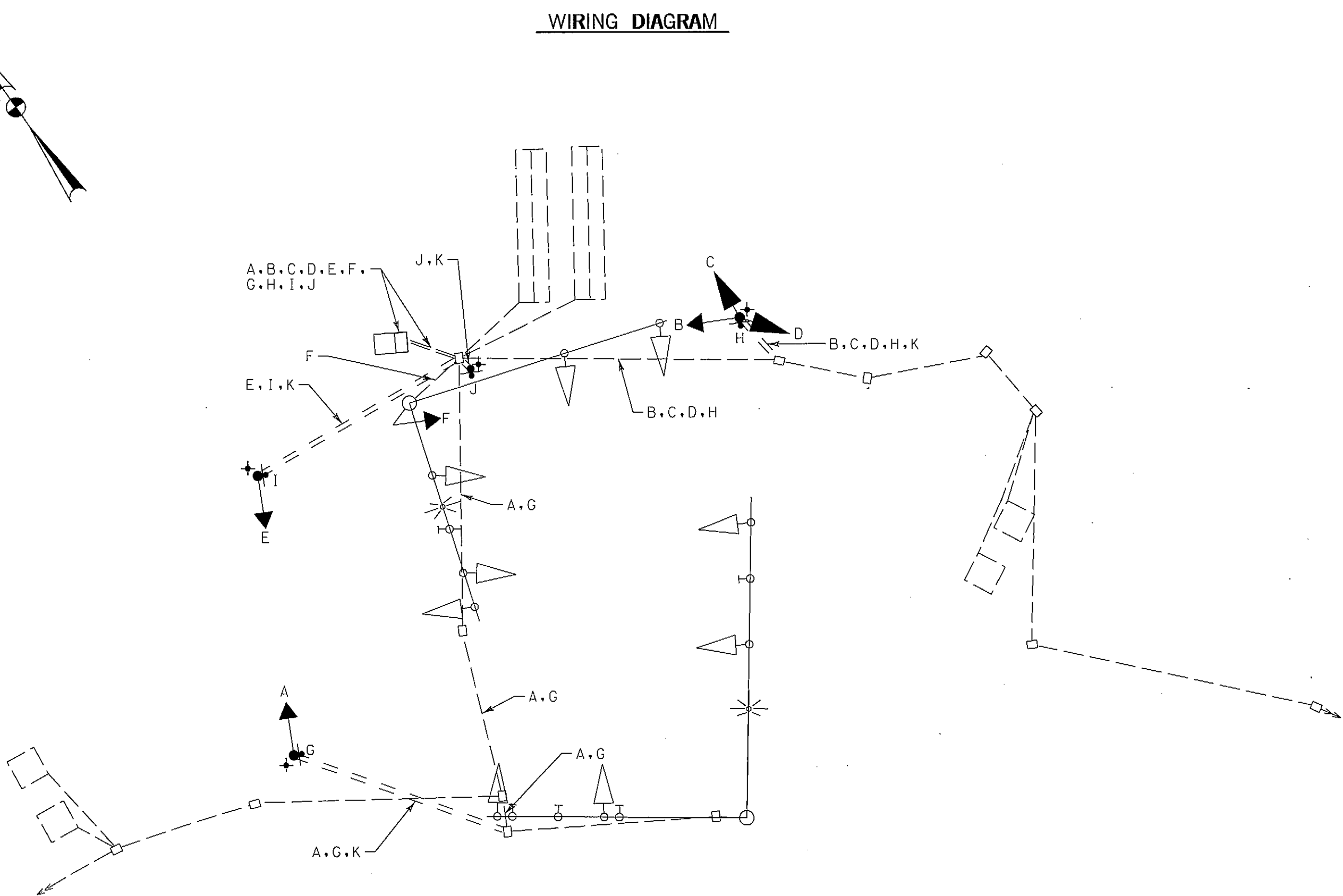
THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE) STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	R	R	R	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW
3 ALT CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	R	R	R	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A
B
C
D
E
F
G
H
I
J
K
+
5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
3/4 IN. X 10 FT. GROUND ROD

TOD NO: XY139-03
SHA NO: AA189B53
MD 162, MD 170, MD 176 @ Various Locations

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 162 (AVIATION BLVD) AND MD 762 (ANDOVER ROAD)
(LINTHICUM HEIGHTS, MD)

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE FEBRUARY, 2013 CONTRACT NO. XY1395185

DESIGNED BY J.D.C. COUNTY ANNE ARUNDEL
DRAWN BY J.D.C. LOGMILE 0216201.63
CHECKED BY N.M.L. TMS NO. 1653
F.A.P. NO. TOD NO.

TS NO. 2337E DRAWING TSP-30 OF 33 SHEET NO. 30 OF 33

WR&A

WHITMAN, REQUARDT
& ASSOCIATES, LLP
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BY: bdonoway